



WaterMark Certification Scheme

Notice of Direction 2022/4.0

Annual factory inspections of Lead Free plumbing products

Intent

This notice is to provide direction on the requirement for annual factory inspections for Lead Free WaterMark certified products.

Background

This Notice of Direction is provided in accordance with clause 5(c) of the Rules for the WaterMark Certification Scheme.

The Australian Building Codes Board (ABCB) decided to limit the allowable lead content in plumbing products, which contain copper alloys and are intended for use in contact with drinking water, to a weighted average lead content of not more than 0.25%.

Clause A5G4(2) of NCC Volume Three 2022 (at **Attachment 1**) outlines the requirements for any plumbing product containing copper alloy and intended for use in contact with drinking water, as well as the means for demonstrating evidence of suitability to those requirements. A transition period was provided in NCC 2022 from 1 September 2022 until 31 August 2025 to conform to those requirements. However, due to delays in the registration of the Lead Free WaterMark trademark and ongoing supply chain constraints, the ABCB subsequently redetermined the transition period to commence on 1 May 2023 and cease by 30 April 2026.

From 1 May 2026, A5G4(2) of the NCC Volume Three will take effect. Only products WaterMark certified as conforming to the Lead Free requirements, where required, will be authorised for use in plumbing installations.

The WaterMark Certification Scheme Manual clause **8.5.1 VI** requires annual product conformity surveillance to be undertaken by WaterMark Conformity Assessment Bodies (WMCABs) including product inspection. Clause **8.5.1 I** of the Manual requires factory inspections to be undertaken by WMCABs for all WaterMark certified products during initial product assessment and five-yearly re-certification.

In relation to Lead Free WaterMark certification, stakeholders have advised the ABCB that critical aspects such as materials stability and lead washing (acid pickling) processes can only be effectively authorised during an on-site factory inspection of Lead Free plumbing products at the time of annual factory audit.

In response to stakeholder advice, the ABCB Office will require factory inspections and audits at each manufacturing location, as part of annual product conformity surveillance, for products WaterMark certified to the Lead Free requirements, for a trial period concluding five years after clause A5G4(2) of NCC Volume Three 2025 takes effect.

Prior to the conclusion of the trial period, the ABCB Office will review compliance outcomes to determine if there is a need to continue annual factory inspections and audits for products WaterMark certified to the Lead Free requirements.

Reference Documents

- National Construction Code Volume Three 2022 (NCC 2022), and any subsequent editions
- [Manual for the WaterMark Certification Scheme](#)
- ABCB Notice of Direction 2021/4.2 Certification transition arrangements for Lead Free plumbing products

Direction

The directions are as follows:

- 1.0 The Lead Free requirements of the NCC 2022 are shown at **Attachment 1** of this notice. Transition arrangements to comply with these requirements by 1 May 2026 have commenced.
- 2.0 The meaning of words used in this notice are as per the [Manual for the WaterMark Certification Scheme](#) clause 1.3 Definitions.
- 3.0 In addition to the annual product conformity assessment requirements of clause **8.5.1 VI.** of the Manual, and the factory inspection requirements at clause **8.5.1 I.** of the Manual, any product to be WaterMark Lead Free certified shall also require annual factory inspections and audits at each manufacturing location.
- 4.0 Direction 3.0 shall apply for all products Lead Free WaterMark certified from the date of certification until five years after 1 May 2026, when clause A5G4(2) of NCC Volume Three 2022 takes effect.

Further Information

Should any WaterMark Certification Scheme stakeholder require further clarification, they should contact the ABCB office directly for further advice on 1300 134 631 or email watermark@abcb.gov.au.

Date of publication: May 2023

ATTACHMENT 1

A5G4 Evidence of suitability – Volume Three (PCA) 2022

- (2) Any *product* that **contains copper alloy and** is intended for use in contact with *drinking water* must have a *weighted average* lead content of not more than 0.25% verified in the form of either—
- (a) a test report provided by an *Accredited Testing Laboratory*, in accordance with NSF/ANSI/CAN 372; or
 - (b) a *WaterMark Licence* issued in accordance with (3), if it includes compliance with NSF/ANSI/CAN 372.

Notes:

1. A5G4(2) does not take effect until 1 September 2025. *[Redetermined by ABCB to 1 May 2026]*
2. Note 1 does not prevent use of *products* certified in accordance with A5G4(2) prior to 1 September 2025. *[Redetermined by ABCB to 1 May 2026]*

Applications:

Products subject to the requirements of A5G4(2) are specifically nominated in the *WaterMark Schedule of Products* and the *WaterMark Schedule of Excluded Products*.

Exemptions:

Products that are used exclusively for non-drinking uses such as manufacturing, industrial processing, irrigation, or other uses where water is not anticipated to be used for human consumption are excluded from the requirements of A5G4(2).

Explanatory information:

Some examples of *products* subject to A5G4(2) include the following:

- (a) Copper alloy fittings.
- (b) Stainless-steel braided hoses.
- (c) Valves (such as valves used for isolation, backflow prevention, alteration of pressure and temperature).
- (d) Taps and mixers.
- (e) Water meters.
- (f) Pumps (for use with cold and heated water services).
- (g) Water heaters.
- (h) Residential water filtration equipment.
- (i) Water dispensers (such as boiling and cooling units, drinking fountains and bottle fillers).
- (j) Fire sprinkler systems connected to the cold water service that are not isolated from fixtures and fittings intended to supply water for human consumption

Some examples of products excluded from the requirements of A5G4(2) include the following:

- (a) Shower heads for bathing.
- (b) Emergency showers, eye wash and/or face wash equipment.
- (c) Pumps used for irrigation, fire-fighting or other non-drinking purposes.
- (d) Fire-fighting water services and equipment including residential fire sprinklers.
- (e) Appliances, including washing machines and dishwashers.
- (f) Commercial boilers associated with heating, ventilation and air-conditioning systems.
- (g) Sanitary fixtures (such as toilets, cistern inlet valves, bidets and urinals).
- (h) *Non-drinking water* services (such as recycled water systems).

Product certification transition arrangements are outlined in Notices of Direction issued through the *WaterMark Certification Scheme*.

Lead is currently permitted in small proportions in the raw materials used to manufacture some plumbing *products*. Whilst the allowable lead levels permitted in *products* manufactured prior to 1 September 2025 *[Redetermined by ABCB to 1 May 2026]* ensures compliance with the Australian Drinking Water Guidelines, the use of *products* compliant with the lead levels in A5G4(2) is encouraged, to avoid the potential for adverse effects on human health.